



Emerging Technologies and Judiciary

This editorial is based on [“Doing Justice with AI”](#) which was published in the Financial Express on 04/04/2023. It discusses how the application of emerging technologies can transform the judicial system and the benefits that it can bring.

For Prelims: Emerging Technologies, Judiciary, e-Courts project, Artificial Intelligence, Machine Learning, SUVAS, SUPACE, Facial Recognition Technology, Internet of Things

For Mains: Emerging Technologies and Judiciary, Challenges with Application of Emerging Technologies in the Judicial System

The world has **witnessed a significant transformation in the past two decades, with digitalisation** being the driving force behind it. The advent of new technologies has transformed all sectors, from banking to healthcare, changing the way we conduct business and access services. With the potential to improve efficiency and enhance experiences, **digitalisation has earned its stature as the buzzword of the day.**

In this context, the **judiciary is an area that has significant potential for emerging technologies to play a bigger role.**

There is no doubt that **emerging technologies** will play an **indispensable role in strengthening the nation.** While there are always concerns that arise with change, **it is up to us to leverage potential, offset risks with checks, and deliver solutions** that can truly impact change in a significant way.

How Emerging Technologies can Transform the Judicial System?

▪ Digitalization of Court Proceedings:

- One of the most significant benefits of emerging technologies is the **digitalization of court proceedings.**
- The **use of electronic systems can help in reducing paperwork, improving accessibility,** and facilitating the efficient management of cases.
- The digitization of court records can help in making them easily accessible, improving transparency, and speeding up the judicial process.
- **For example,** the [e-Courts project](#) aims to computerize the working of courts in the country and make the judicial system more efficient.

▪ Use of AI and Machine Learning:

- [Artificial intelligence](#) and [machine learning](#) can **help in analyzing vast amounts of data, identifying patterns, and predicting outcomes.**
- Several SC and HC judges have recognised the value and proposed that AI tools be introduced to enhance the efficiency of the justice delivery system – both in terms of

quality and quantity.

- Currently, the courts have implemented two tools – **Supreme Court Vidhik Anuvaad Software (SUVAS)** and **Supreme Court Portal for Assistance in Court's Efficiency (SUPACE)** in its systems.
 - SUVAS is an **AI-enabled translation tool** for conversion of orders/judgments to vernacular languages, while SUPACE is being developed to function as an **AI Research Assistant tool**.

▪ **E-filing of Cases:**

- The use of **e-filing can make the process of filing cases faster, more efficient, and cost-effective**. E-filing can help in reducing the time taken for filing, improve data accuracy, and eliminate the need for physical presence in court.
 - For example, the **e-filing portal of the Supreme Court of India enables lawyers and litigants to file cases** and access case records online.

▪ **Video Conferencing for Hearings:**

- The use of **video conferencing can help in conducting hearings remotely**, making it easier for lawyers and litigants to participate in the judicial process. Video conferencing can save time and money, reduce the burden of travel, and ensure the safety and security of all participants.
 - For example, during the **Covid-19 pandemic**, the Indian courts started using video conferencing to conduct virtual hearings.

▪ **Blockchain for Secure Record-Keeping:**

- **Blockchain technology can help in ensuring the security and transparency of court records**. The use of blockchain can help in preventing tampering, maintaining the integrity of data, and ensuring that court records are secure and accessible only to authorized users.
 - For example, **the Indian state of Telangana is using blockchain technology** to secure land records and prevent fraud.

What are the Challenges with Application of Emerging Technologies in the Judicial System?

▪ **Data Security:**

- With the **increasing amount of sensitive data being collected by the judicial system**, it is crucial to ensure that this data is kept secure. **Any data breaches could compromise the integrity of the justice system** and undermine public trust.

▪ **Bias and Discrimination:**

- Emerging technologies such as **Artificial Intelligence (AI)** may **inadvertently perpetuate bias and discrimination** if the algorithms used are not designed with care. There is also the risk that these technologies could amplify existing biases and inequalities in the justice system.

▪ **Lack of Understanding:**

- **Many legal professionals may not have the technical expertise** required to fully understand the capabilities and limitations of emerging technologies. This **could lead to misunderstandings about how these technologies should be applied** and result in ineffective or inappropriate use.

▪ **Privacy Concerns:**

- The use of **emerging technologies could potentially violate privacy rights**.
 - For example, **facial recognition technology** could be used to identify individuals without their consent, and there is a risk that this technology could be misused by law enforcement or other organizations.

▪ **Cost:**

- The **implementation of emerging technologies can be expensive**, and the judicial system may not have the resources to invest in these technologies.
- This **could limit the potential benefits that these technologies** could bring to the justice system.

▪ **Ethical Considerations:**

- There are **several ethical considerations that need to be taken into account** when implementing emerging technologies in the judicial system.
- There is also concern with **respect to the lack of the human element or 'conscience'**

required for the act of judging.

- For example, **it is essential to ensure that these technologies do not compromise the rights of individuals** or undermine the integrity of the justice system.

What Should be the Way Forward?

▪ Ethical Considerations:

- Emerging technologies can have ethical implications, and the judicial system needs to ensure that these technologies are being used in a way that is consistent with ethical standards.

▪ Data Privacy and Security:

- Emerging technologies such as AI and **Internet Of Things (IoT)** rely heavily on **data collection**, and it is important to ensure that this data is being collected and used in a way that is compliant with data privacy and security regulations.

▪ Accessibility:

- The **judicial system must ensure that emerging technologies do not create barriers to accessibility** for individuals with disabilities or those with limited access to technology.

▪ Transparency and Accountability:

- The **use of emerging technologies must be transparent and subject to accountability** measures to ensure that they are being used fairly and justly.

▪ Training and Education:

- The **judicial system must ensure that judges, lawyers, and other stakeholders are properly trained and educated** on the use of emerging technologies to ensure that they are being used effectively and appropriately.

Drishti Mains Question

What are the main challenges hindering the effective application of emerging technologies in the judicial system, and how can they be addressed to improve the efficiency and fairness of the justice system?

UPSC Civil Services Examination, Previous Year Question (PYQ)

Q. With reference to the Indian judiciary, consider the following statements:

1. Any retired judge of the Supreme Court of India can be called back to sit and act as a Supreme Court judge by the Chief Justice of India with the prior permission of the President of India.
2. A High Court in India has the power to review its own judgement as the Supreme Court does.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (c)

Expl:

- As per Article 128 of Indian Constitution, the Chief Justice of India may at any time, with the previous consent of the President, request any person to sit and act as a Judge of the Supreme Court with the following qualifications:
 - Who has held the office of a Judge of the Supreme Court. Hence, statement 1 is correct.
 - Who has held the office of a Judge of a High Court and is duly qualified for appointment as a Judge of the Supreme Court.
- Being a Court of Record, the High Court can review its own judgments under Article 226 of the Constitution of India. Similarly, under Article 137, the Supreme Court shall have the power to

review any judgment pronounced or order made by it.

- **Hence, statement 2 is correct.**
- **Therefore, option (c) is the correct answer.**

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